



परीक्षार्थी द्वारा भरा जावे ↓

परीक्षा का विषय	विषय कोड	परीक्षा का माध्यम
Science	2 0 0	English

परीक्षार्थी द्वारा भरा जावे ↓

परीक्षार्थी का रोल नम्बर

1	7	1	4	4	1	1	7	1	X
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शत एक चार चार एक एक शत एक X

एक एक दो चार तीन नौ पांच छः आठ

केन्द्राध्यक्ष/सहायक केन्द्राध्यक्ष एवं परीक्षक द्वारा भरा जावे ↓

क :- पूरक उच्चार पुस्तिकाओं की संख्या अंकों में  शब्दों में

ख :- परीक्षार्थी का कक्ष क्रमांक

ग :- परीक्षा का दिनांक

परीक्षा का नाम एवं परीक्षा केन्द्र क्रमांक की मुद्रा

**हाई स्कूल** केन्द्र क्रमांक-142034

पर्यवेक्षक का नाम एवं हस्ताक्षर  केन्द्राध्यक्ष/सहायक केन्द्राध्यक्ष के हस्ताक्षर

परीक्षक एवं उपमुख्य परीक्षक द्वारा भरा जावे ↓

परीक्षक एवं उपमुख्य परीक्षक द्वारा भरा जावे ↓

प्रमाणित किया जाता है कि मूल्यांकन के समय पूरक उच्चार पुस्तिकाओं की संख्या उपरोक्तानुसार सही पाई गेली क्रापट स्टीकर क्षतिग्रस्त नहीं पाया गया तथा अन्दर के पृष्ठों के अनुरूप मुख्य पृष्ठ पर अंकों की प्रविष्टी एवं अंकों का योग सही है।

निर्धारित मुद्रा : नाम, पदनाम, मोबाईल नम्बर, परीक्षक क्रमांक एवं पदांकित संस्था के नाम की मुद्रा लगाएं।

उप मुख्य परीक्षक के हस्ताक्षर एवं निर्धारित मुद्रा:  परीक्षक के हस्ताक्षर एवं निर्धारित मुद्रा:

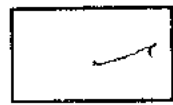
केवल परीक्षक द्वारा भरा जावे।

प्रश्न क्रमांक के सम्मुख प्राप्तांकों की प्रविष्टी करें।

प्रश्न क्रमांक	पृष्ठ क्रमांक	प्राप्तांक	अंकों में
1		0	1
2		0	1
3		0	1
4		0	1
5		0	2
6		0	1
7		0	1
8		0	1
9		0	1
10		0	1
11		0	1
12		0	1
13		0	1
14		0	1
15		0	1
16		0	1
17		0	1
18		0	1
19		0	1
20		0	1
21		0	1
22		0	1
23		0	1
24		0	1
25		0	1
26		0	1
27		0	1
28		0	1

कल प. में कल प्राप्तांक अंकों में

2



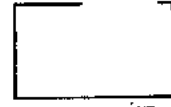
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प्रश्न क्र.

Ans. of Q. no. 1

Fill in the blanks.

Ans(i) 3400 Km.

Ans(ii) Triphala

Ans(iii) Jupiter

Ans(iv) Aryabhata

Ans(v) 746

Choose + Ans. of Q. no. 2

- Choose the correct

Ans(i) (b) Slow reaction.

Ans(ii) (b) 25 cm

Ans(iii) (b) Ampere

Ans(iv) (a) Methane

Ans(v) (a) In thoracic cavity.

3

$\square + \square = \square$   
दोम अंक      पृष्ठ 3 अंक      कुल अंक



प्रश्न क.

Ans. of Q. no. 3

Match the column

'A'

'B'

(i) Blood group "O"

- (c) ~~Universal donor~~

(ii) Xylem

- (d) ~~Water transport in plants~~

(iii) Liver

- (a) ~~Formation of urea~~

(iv) King of chemicals

- (b) ~~Sulphuric acid ( $H_2SO_4$ )~~

(v) Mercury

- (c) ~~Cinnabar ( $HgS$ )~~

Ans. of Q. no. 4

One word/sentence

Ans (i) ~~Chromosome~~ Chromosomes are found in D.N.A. which contain the genetic material. It is a thread like structure which plays a very important role in reproduction.

4



प्रश्न क्र.

Ans(ii) Vitamin 'C' is found in abundance in Amla.

Ans(iii) The valency of carbon is 4.

Ans(iv) The minerals from which metals can be <sup>easily</sup> profitably and economically extracted, are called 'Ores'.

Ans(v) Polythene is a compound which is formed by the polymerization of Ethylene.

Ans. of Q. no. 5

Law of Reflection -

(i) Angle of reflection is always equal to the angle of incidence.  
 $\angle i = \angle r$

(ii) The incident ray, reflected ray and the normal (at the point of incidence) all lie in the same plane.

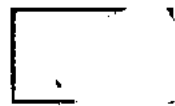
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पृष्ठ 5 के अंक

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योग पूर्व पृष्ठ

पृष्ठ 5 के अंक

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प्रश्न क्र

Ans of Q.no. 6

"The process of plating one metal on the surface of another metal by chemical effect of electric current is called electroplating. It is based on the principle of electrolysis."

Ans of Q.no. 7 (or)

The full name of INSAT is Indian National Satellite.

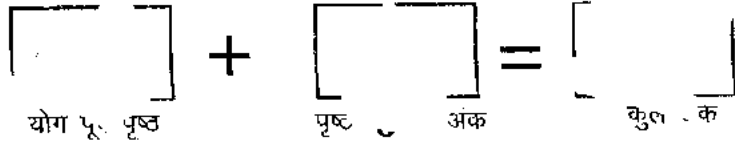
Ans of Q.no. 8

The process in which complex organic compounds are decomposed into simple organic compounds in the presence of an enzyme, is called Fermentation.

Ans of Q.no. 9 (or)

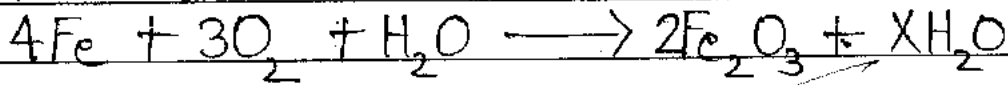
"The formation of corrosion on iron surface is called rusting of iron."

6



It is an unwanted process in which iron reacts with the atmospheric impurities, moisture and forms chemical oxides.

Equation →



Formula of rust =  $\text{Fe}_2\text{O}_3 \cdot \text{XH}_2\text{O}$

Ans. of Q. no. 10

S.No	Metals	Non-metals
(i)	<u>State</u> → All the metals are solid except mercury.	Non-metals are found in solid, liquid and gaseous state.
(ii)	<u>Malleability</u> → Mostly metals are malleable except alkali metals	Non-metals are brittle.
(iii)	<u>Ductility</u> → Mostly metals are ductile.	Non-metals are non-ductile.

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पृष्ठ 2 का अंक

पृष्ठ 7 का अंक

अंक



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(iv) Conductivity → Metals are good conductors of heat and electricity. Non metals are bad conductors of heat and electricity except - graphite.

Ans. of Q. no. 11

The green house gases like  $\text{CO}_2$ , methane, water vapour, etc. get accumulated in the atmosphere due to various natural and man-made activities. These gases form a layer around the earth and absorb the solar radiation of short wavelength. After, they are converted into long wavelength radiations. These gases do not let them go back into the atmosphere and the temperature of the earth increases. This is called Global warming.

Main reasons of Global warming-

(i) Green house gases like  $\text{CO}_2$ , methane, Ammonia are the main causes of global warming, due to

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योग पूरा करो

पृष्ठ 8 के अंक



प्रश्न क्र.

which the temperature of earth increases.

(ii) Chlorofluorocarbons are also one of the main causes of global warming.

(iii) Human activities like breathing, swimming are also responsible for global warming.

B  
S  
E

Ans. of Q. no. 12

Medicinal importance of following plants -

(i) Tulsi

Tulsi is used to cure stomach disorders, cough and cold. It is worshipped by the Indians. It is used in making tea and Kadha. It is used to remove stomach toxins.

(ii) Neem

It is used to purify blood



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योग पूर्व पृष्ठ

पृष्ठ 9 के अंक

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प्रश्न क्र.

and also used in insecticides due to its germ protection properties. Its branches are used to clean teeth. It also purifies the air.

(iii) Babera -

It is used to cure stomach ache and to remove stomach toxins. It is also used to cure headache and fever. It is used in making Triphala - an ayurvedic medicine.

Ans. of Q. no. 13 (or)

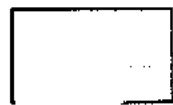
Myopia -

A person suffering from this defect can see the nearer objects clearly but cannot see the far off objects.

Causes of Myopia -

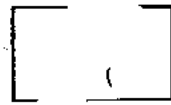
(i) Sometimes the eyeball gets elongated and therefore the image of far off objects is formed in front of retina.

10



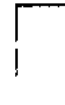
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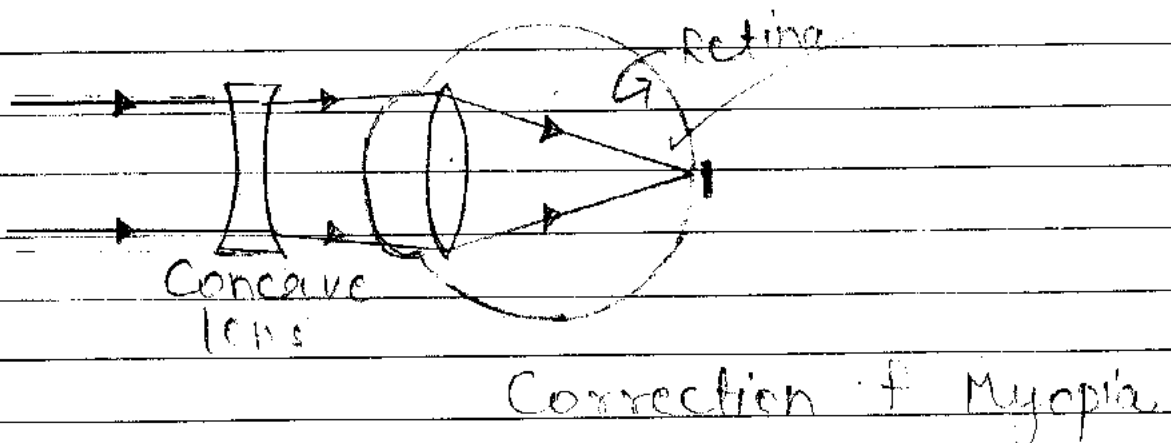
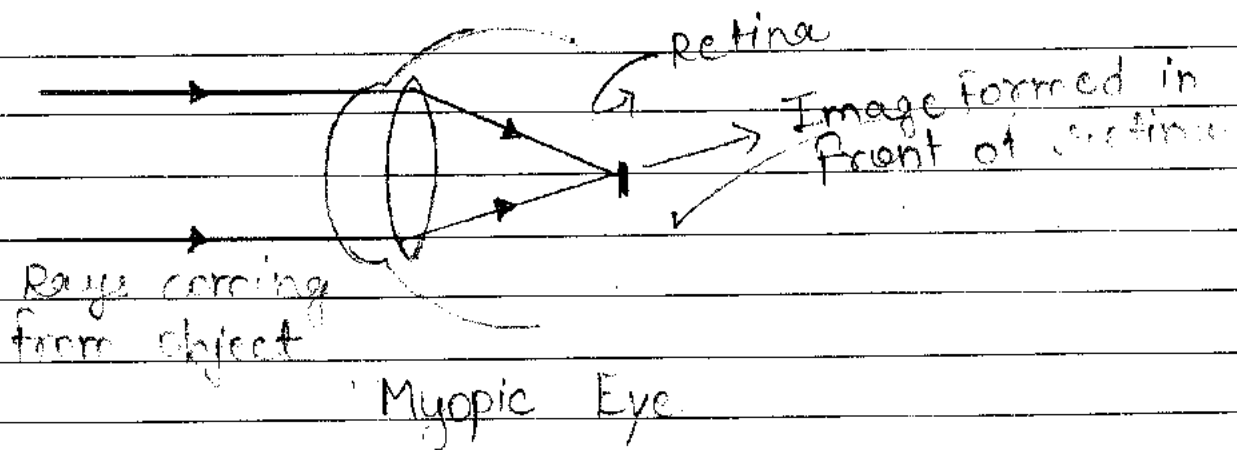
प्रश्न क्र.

(ii) The curvature of lens surfaces increases i.e. the lens becomes thicker, due to which focal length reduces!

### Correction of Myopia -

In this defect the converging capacity of eye increases. Therefore, concave (diverging) lens is used to correct Myopia.

B  
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11

$$\boxed{\quad} + \boxed{\quad} = \boxed{\quad}$$

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Ans. of Q. no. 14 (or)

Given, Potential difference =  $(230 - 220)$   
 $\leq 10 \text{ Volt}$

Charge = 4 coulomb

P.D. = 10 volt

$$\text{Potential difference} = \frac{\text{Work}}{\text{charge}}$$

$$10 = \frac{W}{4}$$

$$W = 40 \text{ joule}$$

Work done = 40 joule

Ans. of Q. no. 15

Characteristics of an ideal fuel-

- (1) High calorific value.
- (2) Low ignition temperature.
- (3) Cheap in cost.
- (4) Balanced rate of combustion.

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प्रश्न क्र.

(5) Easily available and pollution free

(6) Easy to store and safe to transport.

(7) Low amount of waste after burning.

(8) Absence of poisonous substances.

(9) Low percentage of non-combustible material.

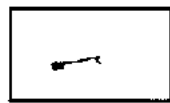
Ans. of Q. no. 16 (or)

In humans 23 pairs of chromosomes are found. In which 22 pairs are autosomes and 23rd pair is sex chromosome. In women all the 23 pairs of chromosomes are XX but in man the 23rd pair is 'Y'. If the X chromosome of man gets fertilized with X chromosome of woman, then a female child is produced and if the 'Y' chromosome of man

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एक पूर्व पृष्ठ

पृष्ठ 13 के अंक

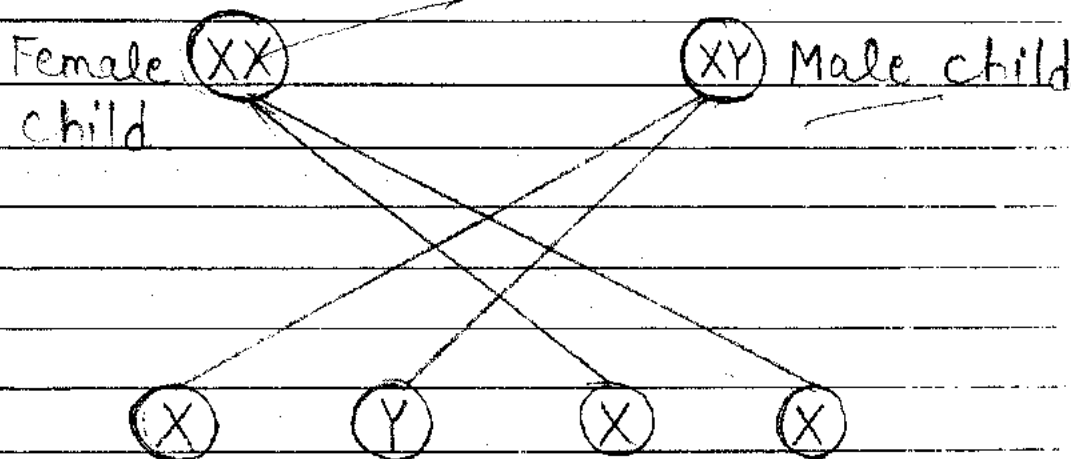
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gets fertilized with X chromosome of woman, then a female child is produced. Therefore, male child is represented by 'XY' and a female child is represented by 'XX'.

Therefore 'Y' chromosome in man is responsible for sex determination and this whole process in humans is called sex determination.

Line diagram of sex determination-



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योग पूर्व पृष्ठ



पृष्ठ 14 के अंक



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प्रश्न क्र.

Ans. of Q. no. 17Soap -

Soaps are sodium or potassium salts of higher carboxylic acids (fatty acid). Their general formula is  $R-COONa$ .

$R = C_{17}H_{35}$  or higher carboxylic acids.

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Soaps are prepared by hydrolysis of fats or oils by alkalis.

~~Soa~~ Detergents are considered better than soap because soap forms insoluble compound called scum with the hard salts like Ca & Mg present in hard water. But detergent does not form insoluble compounds with Ca and Mg present in hard water.

Therefore, detergent gives foam even in hard water but soap does not give foam with hard water.

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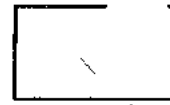
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Detergents have more cleaning capacity than soaps, therefore detergents are better than soaps.

Ans. of Q. no. 18

Difference between Acids and Bases

Acid	Base
(1) Acids are sour in taste.	(1) Bases are bitter in taste.
(2) Acid turns blue litmus paper into red.	(2) Base turns red litmus paper into blue.
(3) Acid gives $H^+$ ions in aqueous solution.	(3) Base gives $OH^-$ (hydroxy) ions in aqueous solution.
(4) Give $CO_2$ with metallic carbonates.	(4) Do not give $CO_2$ with metallic carbonates.

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योग पूर्व पृष्ठ

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पृष्ठ 16 के अंक

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कुल अंक



प्रश्न 34

(5) Neutralize bases giving salt and water.

(5) Neutralize acids giving salt and water.

Name of one strong acid →

HCl (Hydrochloric acid)

Name of one strong base →

NaOH (Sodium hydroxide)

B  
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Ans. of Q. no. 19

Photosynthesis and respiration are different from each other. But they are interconnected.

Differences between photosynthesis and respiration are as follows -

Photosynthesis	Respiration
(1) In this process, water and CO <sub>2</sub> are synthesized	(1) In this process, complex organic compounds are





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to form glucose and oxygen in the presence of sunlight & chlorophyll

decomposed into  $\text{CO}_2$  and water.

(2) This process is ~~constructive~~.

(2) This process is destructive.

(3) This reaction takes place only in sunlight.

(3) This reaction takes place in dark as well as in light.

(4) In this process, energy is stored in the food.

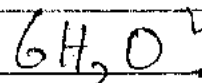
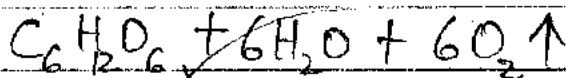
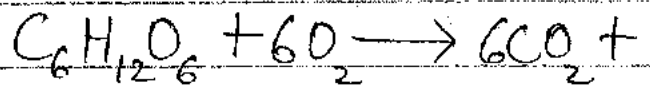
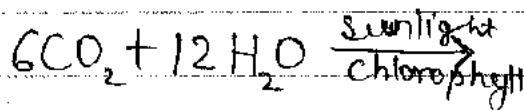
(4) In this process, energy is released from food.

(5) This process takes place in green cells of plants only.

(5) This process takes place in all the cells of plants and animals.

(6) It's equation is -

(6) It's equation is -



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Ans. of Q. no. 20

Differences between blood and lymph.

<u>Blood</u>	<u>Lymph</u>
(1) Blood is dark red in colour and a soft fluid connective tissue.	(1) Lymph is colourless and transparent material.
(2) Red blood corpuscles are present in blood.	(2) Red blood corpuscles are not present in lymph.
(3) Blood is salty in taste.	(3) Lymph is tasteless.
(4) It takes part in clotting.	(4) It doesn't take part in clotting.
(5) Blood transport oxygen and $CO_2$ to different parts of the body.	(5) Lymph doesn't transport oxygen and carbon dioxide to various parts of body.
(6) Blood controls balance of water in body.	(6) Lymph does not control balance of water in body.

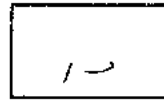
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योग पूर्व पृष्ठ

पृष्ठ 19 के अंक

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(7) White blood  
Corpuscles are present  
in less number

(7) White blood  
Corpuscles are present  
in ~~the~~ more number

(8) It takes part in  
circulatory system

(8) It ~~takes~~ doesn't  
take part in  
circulatory system